

FIG. 2 is a block diagram of a system architecture. The system includes an APPLICATION (211) and a HIGHER-LEVEL LIBRARY (212) connected by a bidirectional arrow (212). The HIGHER-LEVEL LIBRARY (212) is connected to an INSTRUCTION RELAY LIBRARY (213) by a bidirectional arrow (213). The INSTRUCTION RELAY LIBRARY (213) contains three circular components (2131, 2132, 2133) and a table (2134). The table (2134) has a header row with '0' and a data row with '1'. The INSTRUCTION RELAY LIBRARY (213) is connected to an INSTRUCTION EXECUTION MODULE (311) by a bidirectional arrow (311). The INSTRUCTION EXECUTION MODULE (311) contains three circular components (3111, 3112, 3113) and a table (3114). The table (3114) has a header row with '0' and a data row with '1'. The INSTRUCTION EXECUTION MODULE (311) is connected to a HIGHER-LEVEL LIBRARY (312) by a bidirectional arrow (312). The HIGHER-LEVEL LIBRARY (312) is connected to a LOWER-LEVEL LIBRARY (313) by a bidirectional arrow (313). The system is connected to a central component (25) by a bidirectional arrow (25). The system is also connected to a component (100) by a bidirectional arrow (100). The component (100) contains an APPLICATION (110) and a HIGHER-LEVEL LIBRARY (120) connected by a bidirectional arrow (120). The HIGHER-LEVEL LIBRARY (120) is connected to a LOWER-LEVEL LIBRARY (130) by a bidirectional arrow (130).

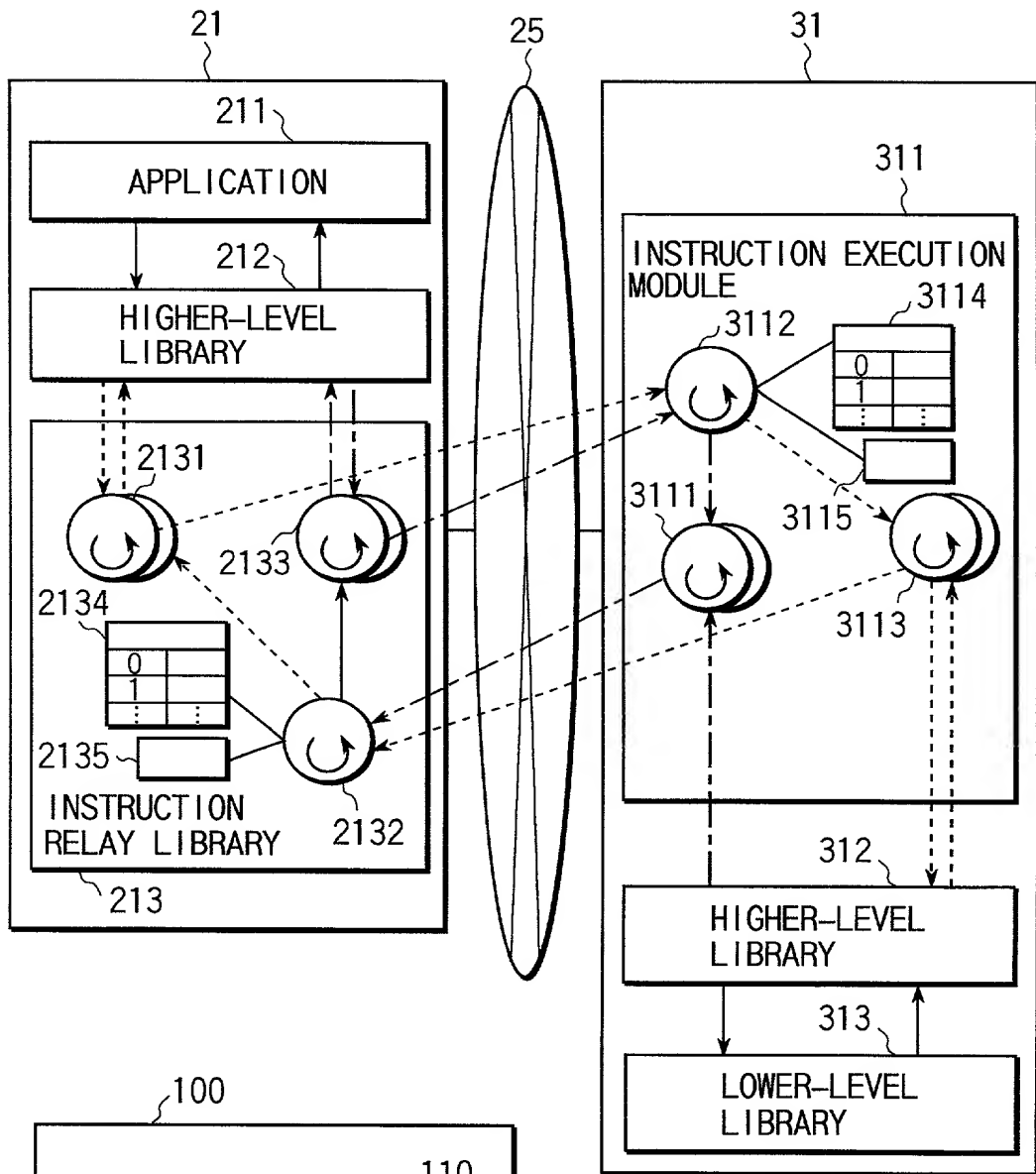


FIG. 2

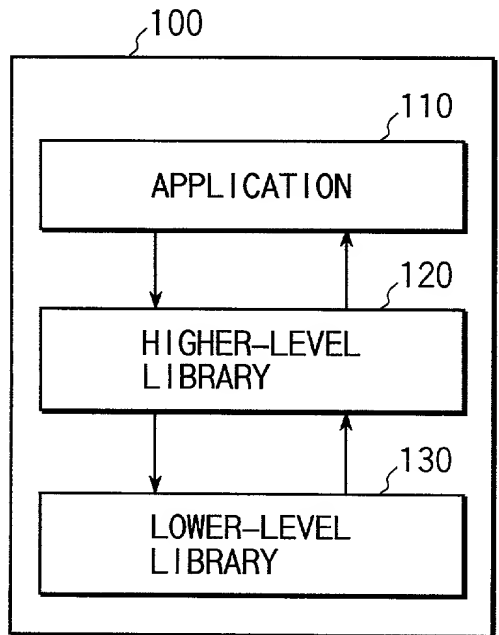
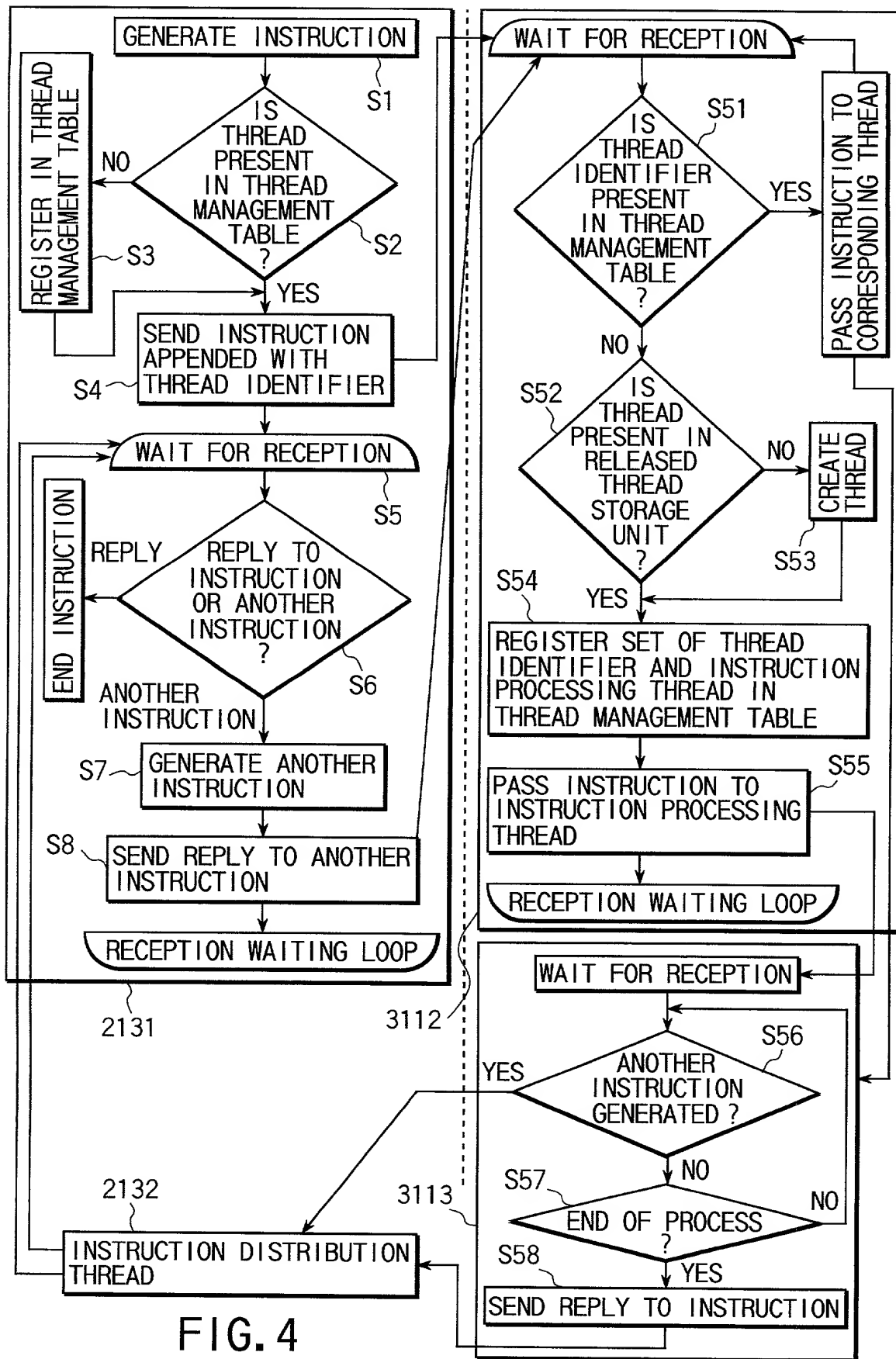


FIG. 3



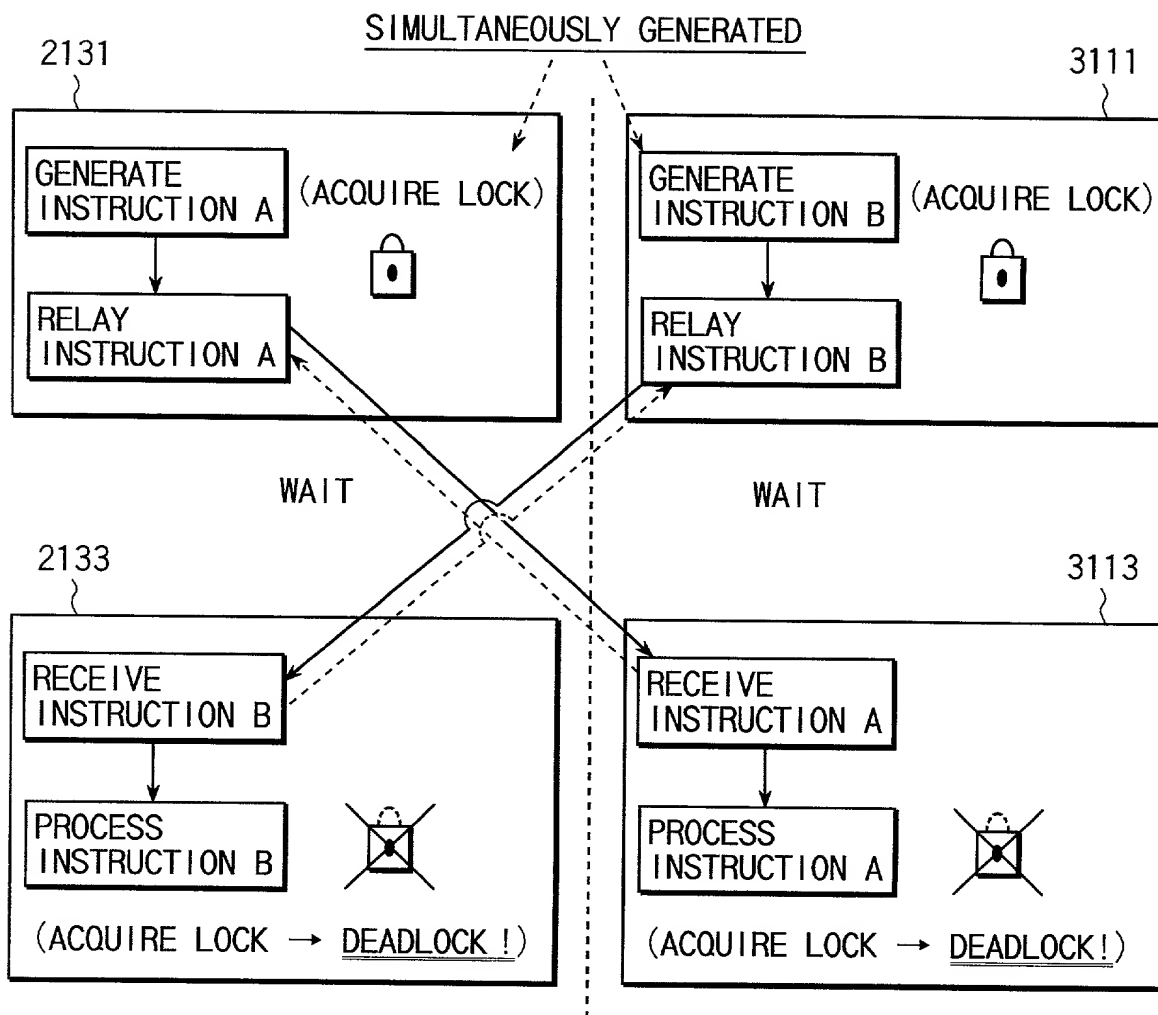


FIG. 5

LOCK #	THREAD #
XXXXX	XXXXX
⋮	⋮

FIG. 7

FIG. 6 is a block diagram of a system architecture showing the interaction between an application and a lower-level library through a higher-level library and an instruction relay library.

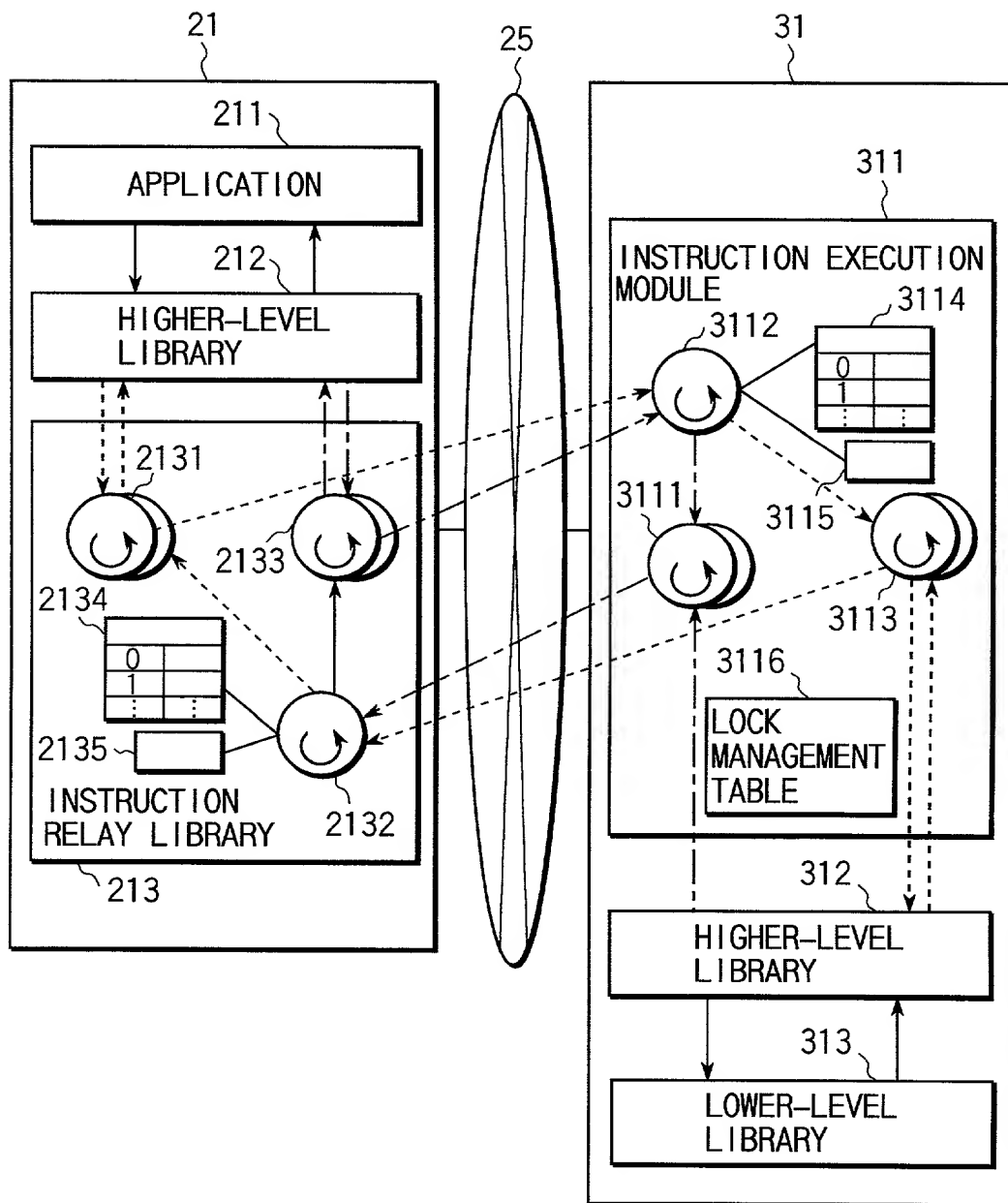


FIG. 6

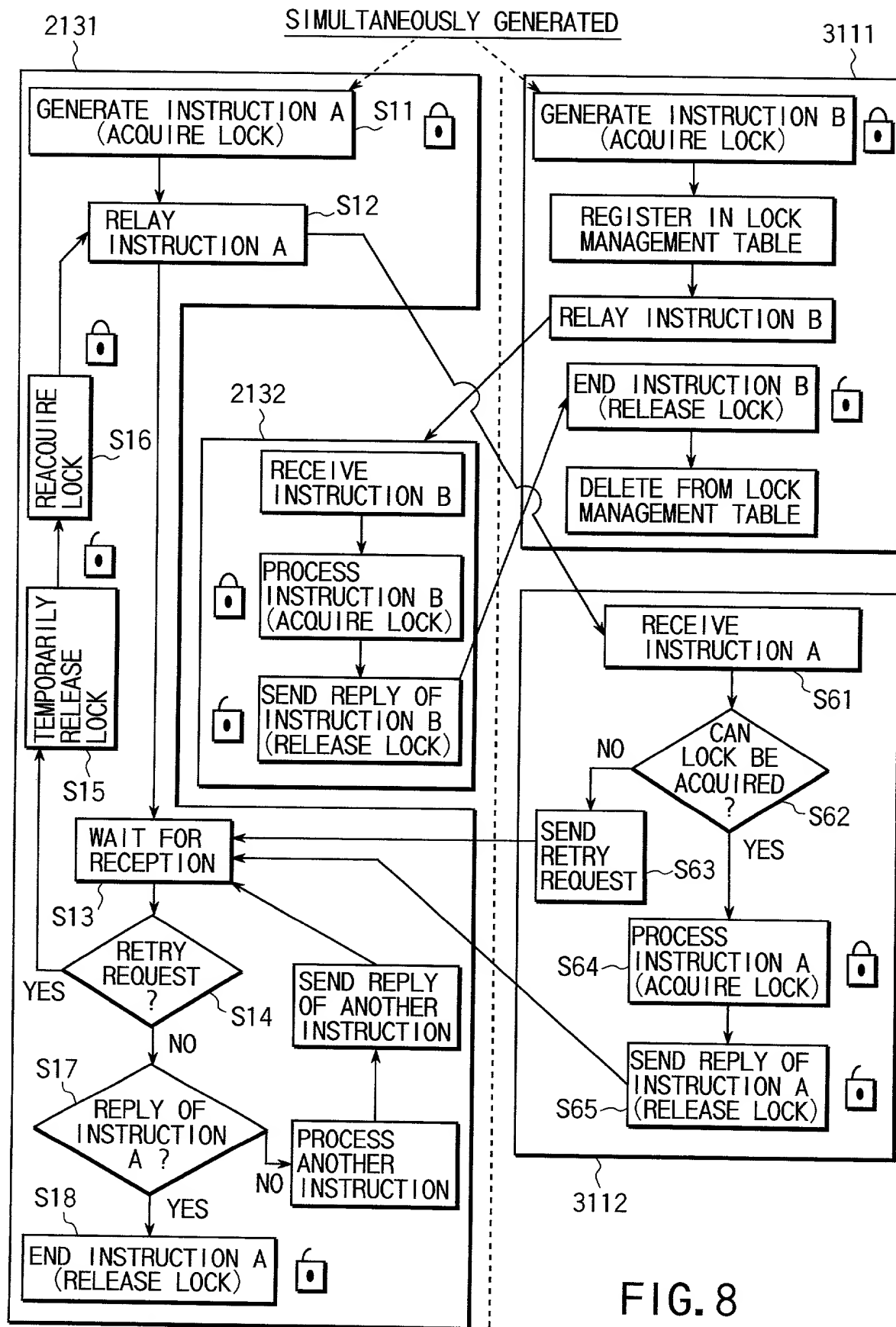


FIG. 8

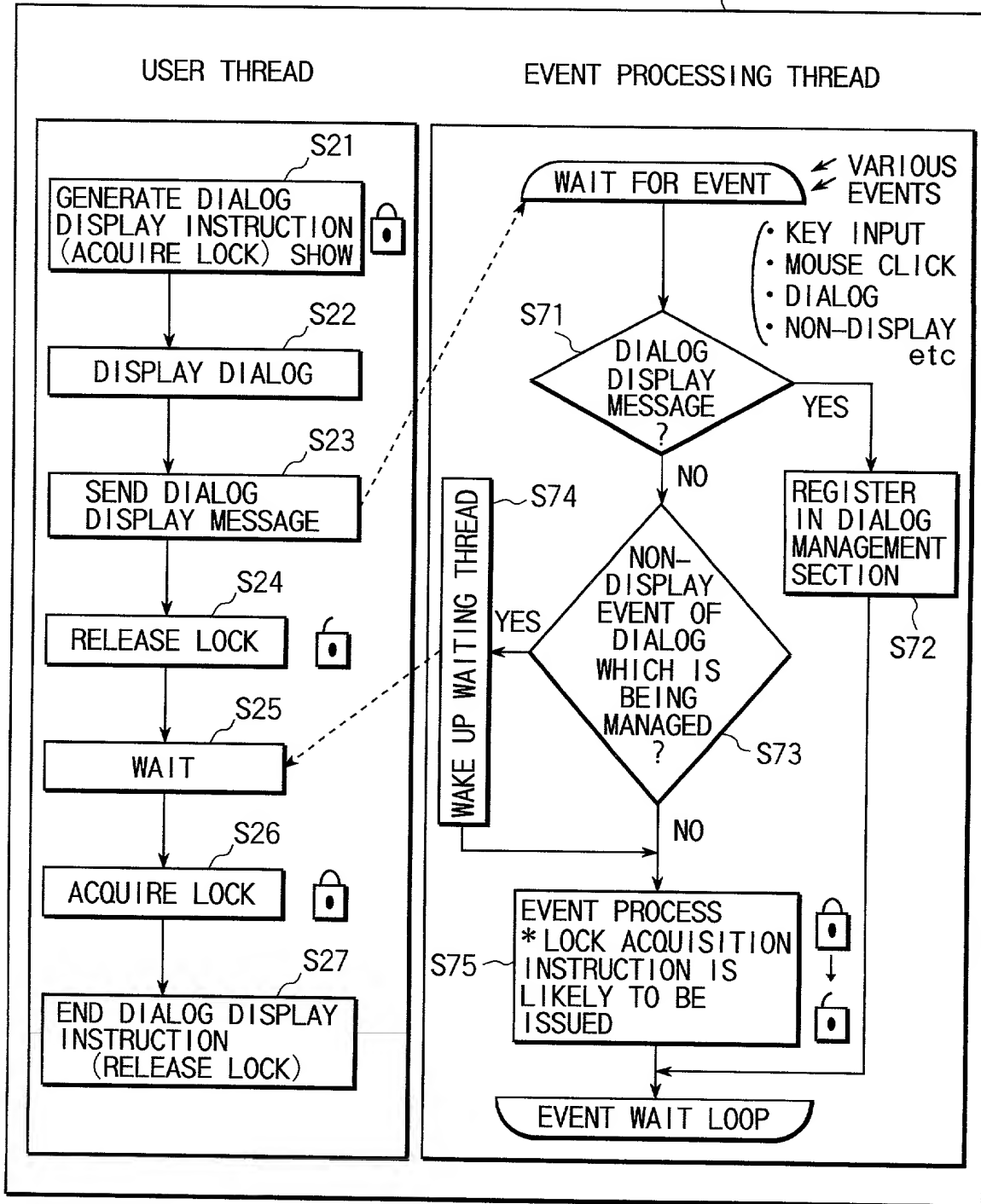


FIG. 9

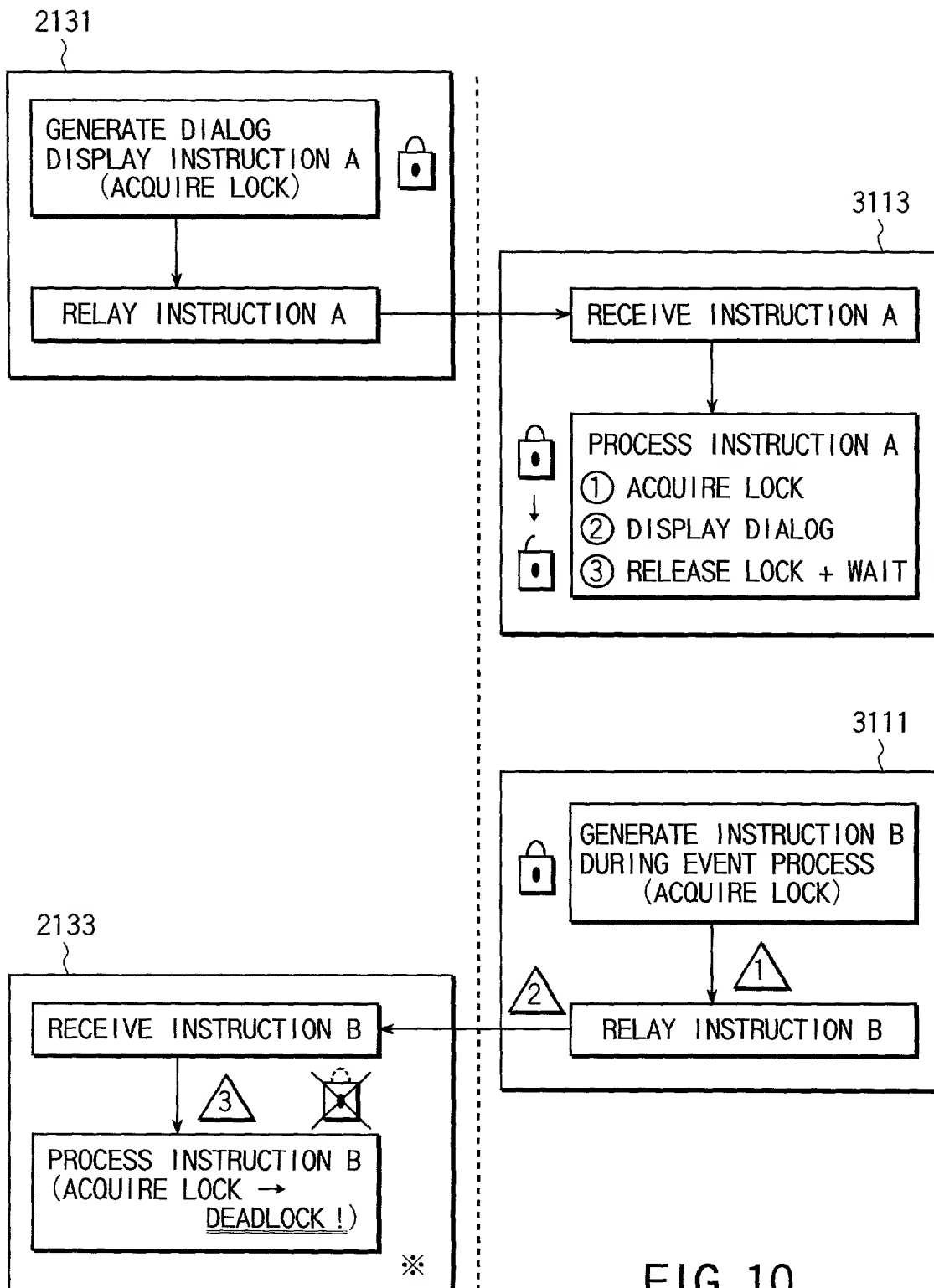


FIG. 10

